

LISTING OF THE CLAIMS

1. (Original) A reflective liquid crystal display comprising:
a linear polarizer for converting natural light into linearly polarized light;
a retardation film for converting the linearly polarized light into circularly polarized light;
a liquid crystal layer for receiving the circularly polarized light and varying the phase of the circularly polarized light depending on the presence of an applied electric field;
a cholesteric liquid crystal color filter for receiving the circularly polarized light from the liquid crystal layer, and selectively reflecting the circularly polarized light received from the liquid crystal layer; and
a black background for absorbing a portion of light passing through the color filter.
2. (Original) The reflective liquid crystal display of claim 1, wherein the retardation film is a $\lambda/4$ plate.
3. (Original) The reflective liquid crystal display of claim 1, wherein the black background is located beneath the color filter.
4. (Original) The reflective liquid crystal display of claim 1, wherein the retardation film is located between the linear polarizer and the color filter.
5. (Original) The reflective liquid crystal display of claim 1, wherein the black background is made of a polymeric material.
6. (Original) The reflective liquid crystal display of claim 1, wherein a bandwidth of the color filter can be controlled by adjusting a pitch of the cholesteric liquid crystal color filter.
7. (Original) A reflective liquid crystal display comprising:
first and second substrates opposite to and spaced apart from each other;
a liquid crystal layer interposed between the first and the second substrates, the liquid crystal layer having a first switching mode in which a phase of light is changed while passing through it, and a second switching mode in which the phase of light is not changed while passing through it;

first and second electrodes for applying an electric field to the liquid crystal layer;
a semiconductor element located on the second substrate for switching an electric signal applied to the liquid crystal layer;
a retardation film located on the first substrate for converting linearly polarized light into circularly polarized light;
a linear polarizer located on the retardation film, for converting natural light into the linearly polarized light;
a cholesteric liquid crystal color filter located on the second substrate for selectively reflecting light having at least one color received from the liquid crystal layer; and
a black background located beneath the second substrate for absorbing light passing through the cholesteric liquid crystal color filter.

8. (Original) The reflective liquid crystal display of claim 7, wherein the retardation film is a $\lambda/4$ plate.

9. (Original) The reflective liquid crystal display of claim 7, wherein the black background is made of a polymeric material.

10. (Original) The reflective liquid crystal display of claim 7, wherein a bandwidth of the color filter can be controlled by adjusting a pitch of the cholesteric liquid crystal color filter.

11. Canceled

12. Canceled

13. (Withdrawn) A reflective color liquid crystal display device, comprising:
a first substrate;
a second substrate spaced apart from and opposite to the first substrate, the second substrate having arranged thereon a plurality of pixel electrodes and corresponding common electrodes being spaced apart from each other;
a linear polarizer changing natural light into linearly polarized light and being positioned at an outer surface of the first substrate;

a liquid crystal layer interposed between the first and second substrates and having liquid crystal molecules being oriented by a parallel electric field between each pixel electrode and corresponding common electrode;

a cholesteric liquid crystal color filter disposed between the liquid crystal layer and the second substrate, selectively reflecting light received from the liquid crystal layer; and

a black background absorbing light passing through the cholesteric liquid crystal color filter.

14. (Withdrawn) The reflective color liquid crystal display device of claim 13, further comprising a negative uniaxial film arranged on the liquid crystal layer.